

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-35 (Canceled)

36 (Currently amended). A method for manufacturing a semiconductor device that comprises a pixel matrix circuit and a driver circuit over a substrate comprising the steps of:

forming an active layer over a substrate;

forming a gate insulating film in contact with the active layer;

forming a first gate wiring comprising tungsten as its main component over the gate insulating film using a first resist mask; ~~and~~

forming an impurity region by adding an impurity element using the first gate wiring and the first resist mask as a mask; and

forming a second gate wiring comprising tungsten as its main component over the gate insulating film using a second resist mask.

37 (Currently amended). The method according to claim 36,

wherein the first and second gate wirings ~~has~~ have a laminate structure comprising a tungsten film and a tungsten nitride film.

38 (Currently amended). The method according to claim 36,

wherein the first and second gate wirings ~~is~~ are formed using a sputtering method.

39 (Currently amended). A method for manufacturing a semiconductor device that comprises a pixel matrix circuit and a driver circuit over a substrate comprising the steps of:

- forming an active layer over a substrate;
- forming a gate insulating film in contact with the active layer;
- forming a first gate wiring comprising tungsten as its main component over the gate insulating film using a first resist mask;
- forming an impurity region by adding an impurity element using the first gate wiring and the first resist mask as a mask;
- forming a second gate wiring comprising tungsten as its main component over the gate insulating film using a second resist mask; and
- forming a nitride film on a surface of the first and second gate wirings by performing nitridation process onto the first and second gate wirings.

40 (Previously presented). The method according to claim 39,
wherein the nitridation process is performed by generating plasma in an ammonium gas atmosphere.

41 (Currently amended). The method according to claim 39,
wherein the first and second gate wirings ~~has~~ have a laminate structure comprising a tungsten film and a tungsten nitride film.

42 (Currently amended). The method according to claim 39,
wherein the first and second gate wirings is are formed using a sputtering method.

43 (Withdrawn). A semiconductor device comprising a pixel matrix circuit and a driver circuit over a substrate:

wherein at least a portion of an LDD region of an n-channel TFT in the driver circuit is disposed so as to overlap a gate wiring of the n-channel TFT;

wherein impurity elements that impart n-type are included in the LDD region of the n-channel TFT in the driver circuit at a higher concentration than in an LDD region of a pixel TFT in the pixel matrix circuit; and

wherein the gate wiring comprises a first layer formed on an insulating film and a second layer on the first layer.

44 (Withdrawn). The semiconductor device according to claim 43,

wherein the second layer comprises a material comprising tungsten as its main component.

45 (Withdrawn). The semiconductor device according to claim 43,

wherein the semiconductor device is one of an active matrix liquid crystal display, an active matrix EL display and an active matrix EC display.

46 (Withdrawn). The semiconductor device according to claim 43,

wherein the semiconductor device is one selected from a group consisting of: video camera, digital camera, projector, goggle type display, car navigation system, a personal computer and a portable information terminal.

47 (Withdrawn). A semiconductor device comprising a pixel matrix circuit and a driver circuit over a substrate:

wherein at least a portion of an LDD region of an n-channel TFT in the driver circuit is disposed so as to overlap a gate wiring of the n-channel TFT;

wherein an LDD region of a pixel TFT in the pixel matrix circuit is disposed so as not to overlap with a gate wiring of the pixel TFT;

wherein impurity elements that impart n-type are included in the LDD region of the n-channel TFT in the driver circuit at a higher concentration than in the LDD region of the pixel TFT;

wherein each of the gate wirings of the n-channel TFT and the pixel TFT comprises a first layer formed on an insulating film and a second layer formed on the first layer.

48 (Withdrawn). The semiconductor device according to claim 47,

wherein the second layer comprises a material comprising tungsten as its main component.

49 (Withdrawn). The semiconductor device according to claim 47,

wherein the semiconductor device is one of an active matrix liquid crystal display, an active matrix EL display and an active matrix EC display.

50 (Withdrawn). The semiconductor device according to claim 47,

wherein the semiconductor device is one selected from a group consisting of: video camera, digital camera, projector, goggle type display, car navigation system, a personal computer and a portable information terminal.

51 (Currently amended). A method for manufacturing a semiconductor device that comprises a pixel matrix circuit and a driver circuit over a substrate comprising the steps of:

forming a semiconductor layer over a substrate;

forming a gate insulating film over the semiconductor layer;

forming a first gate wiring comprising tungsten as its main component over the gate insulating film using a first resist mask; ~~and~~

forming an impurity region by adding an impurity element using the first gate wiring and the first resist mask as a mask; and

forming a second gate wiring comprising tungsten as its main component over the gate insulating film using a second resist mask.

52 (Currently amended). The method according to claim 51,

wherein the first and second gate wirings ~~has~~ have a laminate structure comprising a tungsten film and a tungsten nitride film.

53 (Currently amended). The method according to claim 51,

wherein the first and second gate wirings ~~is~~ are formed using a sputtering method.

54 (Currently amended). A method for manufacturing a semiconductor device that comprises a pixel matrix circuit and a driver circuit over a substrate comprising the steps of:

forming a semiconductor layer over a substrate;

forming a gate insulating film in contact with the semiconductor layer;

forming a first gate wiring comprising tungsten as its main component over the gate

insulating film using a first resist mask;

forming an impurity region by adding an impurity element using the first gate wiring and the first resist mask as a mask;

forming a second gate wiring comprising tungsten as its main component over the gate insulating film using a second resist mask; and

forming a nitride film on a surface of the first and second gate wirings by performing nitridation process onto the first and second gate wirings.

55 (Previously presented). The method according to claim 54,
wherein the nitridation process is performed by generating plasma in an ammonium gas atmosphere.

56 (Currently amended). The method according to claim 54,
wherein the first and second gate wirings ~~has~~ have a laminate structure comprising a tungsten film and a tungsten nitride film.

57 (Currently amended). The method according to claim 54,
wherein the first and second gate wirings ~~is~~ are formed using a sputtering method.

58 (Currently amended). A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over a substrate;

forming a gate insulating film over the semiconductor layer;

forming a first gate wiring comprising tungsten as its main component over the gate insulating film using a first resist mask; ~~and~~

forming an impurity region by adding an impurity element using the first gate wiring and the first resist mask as a mask; and

forming a second gate wiring comprising tungsten as its main component over the gate insulating film using a second resist mask.

59 (Currently amended). The method according to claim 58,

wherein the first and second gate wirings ~~has~~ have a laminate structure comprising a tungsten film and a tungsten nitride film.

60 (Currently amended). The method according to claim 58,

wherein the first and second gate wirings ~~is~~ are formed using a sputtering method.

61 (Currently amended). A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over a substrate;

forming a gate insulating film in contact with the semiconductor layer;

forming a first gate wiring comprising tungsten as its main component over the gate insulating film using a first resist mask;

forming an impurity region by adding an impurity element using the first gate wiring and the first resist mask as a mask;

forming a second gate wiring comprising tungsten as its main component over the gate

insulating film using a second resist mask; and

forming a nitride film on a surface of the first and second gate wirings by performing nitrification process onto the first and second gate wirings.

62 (Previously presented). The method according to claim 61,
wherein the nitrification process is performed by generating plasma in an ammonium gas atmosphere.

63 (Currently amended). The method according to claim 61,
wherein the first and second gate wirings ~~has~~ have a laminate structure comprising a tungsten film and a tungsten nitride film.

64 (Currently amended). The method according to claim 61,
wherein the first and second gate wirings ~~is~~ are formed using a sputtering method.